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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622,840

07/18/2003

Scott Brady Rothgeb

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26720

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06/14/2006

LOCKE LIDDELL & SAPP LLP

ATTN. DOCKETING

600 TRAVIS #3400

HOUSTON, TX 77002

EXAMINER

A, MINH D

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,840	Applicant(s) ROTHGEB ET AL.	
	Examiner Minh D A	Art Unit 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 10-18 is/are rejected.
- 7) ☒ Claim(s) 4-5, 7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a response to the Applicant's filing on 10/23/2006. In virtue of this filing, claims 1-18 are currently presented in the instant applicant.

Applicant's communication filed on 3/23/06 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejection of record, and those rejections are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not made final

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6, 8, 10-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes et al (US 4,642,480).

Regarding claim 1, Hughes discloses a low profile cable with high performance characteristic and figures 1-4, section (28A028b) for antenna) comprising'. A cable body (4) having a foam core (25) having a low- dielectric constant expanded poly-vinyl-chloride foam sheet disposed on at least one surface of the foam core (25) (see two conductor (23-24) for constant PVC). See figure 2, col.3, lines 30 to col.6, lines 1-57.

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Regarding claim 2, Hughes discloses comprising a cable comprising a mechanically interlocking (28a and 28b) together ends of cable. See figure 2, col.6, lines 54-67.

Regarding claim 3, Hughes discloses wherein the foam core(25) comprises polystyrene. See col.5, lines 45-60.

Regarding claim 6, Hughes discloses wherein the low-dielectric constant expanded poly- vinyl-chloride foam sheet is attached on the at least one surface of the foam core by an adhesive or a tape. See figure 1, col.5, lines 1-15.

Regarding claim 8, Hughes inherently discloses wherein the low-dielectric constant expanded poly- vinyl-chloride foam sheet has a dielectric constant equal to or less than two, because Hughes discloses that, this cable has a constant PVC.

Regarding claim 10, Hughes discloses a plurality of concealment panels(18 and 28) for concealing a portion of the antenna, the concealment panels (18 and 28) at least partially composed of an expanded poly-vinyl- chloride foam and inherently discloses a dielectric constant equal to or less than two(because Hughes discloses this cable has a constant PVC). See figure 2, col.3, lines 30 to col.6, lines 1-57.

Regarding claim 11, Hughes discloses comprising a cable comprising a mechanically interlocking (28a and 28b) together ends of cable. See figure 2, col.6, lines 54-67.

Regarding claims 12-13, Hughes discloses the cable comprise a first sheet of expanded polyvinyl-chloride foam and a foam core disposed on a side of the first sheet of expanded poly-vinyl-chloride foam. See figures 1-2.

Regarding claim 14, Hughes discloses wherein the foam core (25) comprises polystyrene. See col.5, lines 45-60.

Regarding claim 15, Hughes discloses wherein the core (25) comprise a second sheet of expanded poly-vinyl-chloride foam disposed on side of form core opposing the first sheet. See figures 1-2.

Regarding claim 16, Hughes discloses wherein the low-dielectric constant expanded poly- vinyl-chloride foam sheet is attached on the at least one surface of the foam core by an adhesive or a tape. See figure 1, col.5, lines 1-15.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al (US 4,642,480).

Regarding claims 17-18, Hughes essentially discloses the claimed invention but does not explicitly disclose that, the cable define curved surface by the thermoforming or vacuum forming a substantially flat sheet and the curved surface have a smaller thickness at edges of the panels than a at center of panels. It would have been an obvious matter of design choice to employ Hughes in any desired interest a curved surface by the thermoforming or vacuum forming a substantially flat sheet and the

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curved surface have a smaller thickness at edges of the panels than a at center of panels in order to maximize the usage of his invention, since applicant does not disclose that, all of these limitations can solve any stated problem and for any particular purpose. Therefore, it appears that the invention would not provide any improvement but merely apply the invention in different presentation.

Allowable Subject Matter

5. Claims 4-5, 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not teach, a foam core has first and second sides, and wherein a first low-dielectric constant expanded poly-vinyl-chloride foam sheet is disposed on the first side and a second low-dielectric constant expanded poly-vinyl-chloride foam sheet is disposed on the second side recited in dependent claim 4.

Prior art does no teach that, wherein the low-dielectric constant expanded poly-vinyl-chloride foam sheet has a thickness of approximately 4 to 10 mm, and wherein the foam core has a thickness of approximately 2-inches or urethane forming a layer between the low-dielectric constant expanded poly-vinyl-chloride foam sheet and the foam core and having a thickness of approximately 3 to 10-mils in dependent claims 7 and 9.

Citation of relevant prior art

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6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al (US 6,144,344) and Dilley et al. (US 4,914,450) are cited to show an antenna.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 AM-2:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner

Minh A

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5/31/06


SHIH-CHAO CHEN
PRIMARY EXAMINER